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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
POKRZYWA, JOSEPH R	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/889,567	MURATA, SUNAO	
	Examiner	Art Unit	
	Joseph R. Pokrzywa	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/9/05 has been entered.

Response to Amendment

2. Applicant's amendment was received on 11/3/05, and has been entered and made of record. Currently, **claims 1-28** are pending.

Response to Arguments

3. Applicant's arguments, see pages 11-15, filed 11/3/05, with respect to the rejection(s) of claim(s) 1, 8, 14, 21, and 28 under 35 U.S.C. 102(e) as being anticipated by Akiyama *et al.* (U.S. Patent Number 6,771,378), have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Teradaira *et al.* (U.S. Patent Number 5,800,081).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-6, 8-11, 14-19, 21-26, and 28** are rejected under 35 U.S.C. 102(b) as being anticipated by Teradaira *et al.* (U.S. Patent Number 5,800,081).

Regarding ***claim 1***, Teradaira discloses a medium having a status information printing program recorded thereon to be run on a host computer in order for a printer to print status information (column 6, lines 1-16), the host computer and the printer being connected for two-way communication (see abstract, Fig. 5, and column 7, lines 25-30), the printing program comprising an output initiation instruction monitor function configured to monitor the output initiation instruction for the status information that the printer outputs through the two-way communication (column 12, line 15-column 13, line 29), the status information being output without solicitation from the host computer (see abstract, column 7, lines 31-64, and column 12, line 15-column 13, line 29), a status information acquisition function on the host side configured to acquire status information data from the printer through the two-way communication (see abstract, column 12, line 15-column 13, line 29), a printing data generation function configured to generate printing data to be printed by the printer based on the status information data acquired by the status information acquisition function on the host side when the output initiation instruction is recognized by the output initiation instruction monitor function (column 6, lines 40-59, and column 8, line 7-column 9, line 41), and a printing data output function configured to

output to the printer through the two-way communication the printing data generated by the printing data generation function (column 6, lines 40-59, and column 8, line 7-column 9, line 41).

Regarding ***claim 2***, Teradaira discloses the medium discussed above in claim 1, and further teaches that the printing data generated by the printing data generation function is dot image data (column 3, lines 61-65).

Regarding ***claim 3***, Teradaira discloses the medium discussed above in claim 1, and further teaches that part of the status information data is in the printer whether the output initiation instruction exists or not (column 7, lines 31-64, and column 12, line 15-column 13, line 29), and initiation instruction monitor function is configured to monitor whether the output initiation instruction is contained in the status information data acquired by the status information acquisition function on the host side (column 7, lines 31-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 4***, Teradaira discloses the medium discussed above in claim 1, and further teaches that the output initiation instruction is a trigger transmitted from the printer through the two-way communication (column 7, lines 25-64, and column 12, line 15-column 13, line 29), and the output initiation instruction monitor function is configured to judge whether the trigger is received (column 7, lines 31-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 5***, Teradaira discloses the medium discussed above in claim 1, and further teaches that the status information acquisition function is configured to analyze the status of the printer based on the acquired status information data (column 7, lines 31-64, and column 12, line 15-column 13, line 29), and the status information acquisition function is configured to

warn a user on the host computer if the printer can perform no printing (column 7, line 31-column 9, line 41).

Regarding ***claim 6***, Teradaira discloses the medium discussed above in claim 1, and further teaches that the status information acquisition function is configured to acquire the communication mode as the status information data when two-way communication is held with the printer (column 7, lines 25-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 8***, Teradaira discloses a printer for holding two-way communication with a host computer and printing status information about the printer (see abstract, Fig. 5, and column 7, lines 25-30), the printer comprising an output initiation instruction unit configured to instruct the output initiation of the status information (automatic status selection and transmission means 75, column 12, line 15-column 13, line 29), a status information acquisition unit on the printer's side configured to acquire status information data on the printer (regular status data generating means 73, column 12, line 15-column 13, line 29), a status information output unit configured to output through the two-way communication (data transmission means 77, column 12, line 15-column 13, line 29), without solicitation from the host computer (see abstract, and column 7, lines 31-64), the status information data acquired by the status information acquisition unit on the printer's side (see abstract), and causing the host computer to generate printing data for the printer to print the status information (column 12, line 49-column 13, line 45), and a printing unit configured to receive the printing data from the host computer through the two-way communication and performing predetermined printing based on the received data (column 6, lines 40-59, and column 8, line 7-column 9, line 41).

Regarding ***claim 9***, Teradaira discloses the printer discussed above in claim 8, and further teaches that the printing data received by the printing unit is dot image data (column 3, lines 61-65).

Regarding ***claim 10***, Teradaira discloses the printer discussed above in claim 8, and further teaches that the status information acquisition unit includes a status information data storage part for storing status information data (column 7, lines 31-64), and is configured to write the output initiation instruction as part of the status information data in accordance with the output initiation instruction of the output initiation instruction unit (column 7, lines 31-64, and column 12, line 15-column 13, line 29), and the status information output unit is configured to output through the two-way communication the status information stored in the status information data storage part (column 7, lines 25-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 11***, Teradaira discloses the printer discussed above in claim 8, and further teaches that the output initiation instruction unit is configured to output a trigger as the output initiation instruction through the two-way communication (column 7, lines 25-64, and column 12, line 15-column 13, line 29), and the status information output unit is configured to output the status information data acquired by the status information acquisition unit after the trigger is outputted (column 7, line 31-column 9, line 41).

Regarding ***claim 14***, Teradaira discloses a printing controller for causing a printer connected for two-way communication to print status information on the printer (see abstract, Fig. 5, and column 7, lines 25-30), the printing controller comprising an output initiation instruction monitor unit configured to monitor the output initiation instruction for the status information that the printer outputs through the two-way communication (column 7, lines 25-30,

and column 12, line 15-column 13, line 29), the status information being output without solicitation from the host computer (see abstract, and column 7, lines 31-64), a status information acquisition unit on the host side configured to acquire status information data from the printer through the two-way communication (column 7, lines 25-30, and column 12, line 15-column 13, line 29), a printing data generation unit configured to generate printing data to be printed by the printer based on the status information data acquired by the status information acquisition unit on the host side when the output initiation instruction monitor unit recognizes the output initiation instruction (column 12, line 49-column 13, line 45), and a printing data output unit configured to output to the printer through the two-way communication the printing data generated by the printing data generation unit (column 6, lines 40-59, and column 8, line 7-column 9, line 41).

Regarding ***claim 15***, Teradaira discloses the controller discussed above in claim 14, and further teaches that the printing data generated by the printing data generation unit is dot image data (column 3, lines 61-65).

Regarding ***claim 16***, Teradaira discloses the controller discussed above in claim 14, and further teaches that part of the status information data is in the printer whether the output initiation instruction exists or not (column 7, lines 31-64, and column 12, line 15-column 13, line 29), and the output initiation instruction monitor unit is configured to monitor whether the output initiation instruction is contained in the status information data acquired by the status information acquisition unit on the host side (column 7, lines 31-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 17***, Teradaira discloses the controller discussed above in claim 14, and further teaches that the output initiation instruction is a trigger transmitted from the printer

through the two-way communication (column 7, lines 25-64, and column 12, line 15-column 13, line 29), and the output initiation instruction monitor unit is configured to judge whether the trigger is received (column 7, lines 31-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 18***, Teradaira discloses the controller discussed above in claim 14, and further teaches that the status information acquisition unit is configured to analyze the status of the printer based on the acquired status information data (column 7, lines 31-64, and column 12, line 15-column 13, line 29), and the status information acquisition unit is configured to warn a user on the host computer if the printer can perform no printing (column 7, line 31-column 9, line 41).

Regarding ***claim 19***, Teradaira discloses the controller discussed above in claim 14, and further teaches that the status information acquisition unit is configured to acquire the communication mode as the status information data when two-way communication is held with the printer (column 7, lines 25-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 21***, Teradaira discloses a status information printing method for causing a printer to print status information under the control of a host computer, the printer and the host computer being connected for two-way communication (see abstract, Fig. 5, and column 7, lines 25-30), the method comprising an output initiation instruction monitor step for monitoring the output initiation instruction for the status information that the printer outputs through the two-way communication (column 7, lines 25-30, and column 12, line 15-column 13, line 29), the status information being output without solicitation from the host computer (see abstract, and column 7, lines 31-64), a status information acquisition step on the host side for acquiring status information data from the printer through the two-way communication (column 7, lines 25-30,

and column 12, line 15-column 13, line 29), a printing data generation step for generating printing data to be printed by the printer based on the status information data acquired in the status information acquisition step on the host side when the output initiation instruction is recognized in the output initiation instruction monitor step (column 12, line 49-column 13, line 45), and a printing data output step for outputting to the printer through the two-way communication the printing data generated in the printing data generation step (column 6, lines 40-59, and column 8, line 7-column 9, line 41).

Regarding ***claim 22***, Teradaira discloses the method discussed above in claim 21, and further teaches that the printing data generated in the printing data generation step is dot image data (column 3, lines 61-65).

Regarding ***claim 23***, Teradaira discloses the method discussed above in claim 21, and further teaches that part of the status information data is in the printer whether the output initiation instruction exists or not (column 7, lines 31-64, and column 12, line 15-column 13, line 29), and the output initiation instruction monitor step monitors whether the output initiation instruction is contained in the status information data acquired in the status information acquisition step on the host side (column 7, lines 31-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 24***, Teradaira discloses the method discussed above in claim 21, and further teaches that the output initiation instruction is a trigger transmitted from the printer through the two-way communication (column 7, lines 25-64, and column 12, line 15-column 13, line 29), and the output initiation instruction monitor step judges whether the trigger is received (column 7, lines 31-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 25***, Teradaira discloses the method discussed above in claim 21, and further teaches that the status information acquisition step analyzes the status of the printer based on the acquired status information data (column 7, lines 31-64, and column 12, line 15-column 13, line 29), and the status information acquisition step warns a user on the host computer if the printer can perform no printing (column 7, line 31-column 9, line 41).

Regarding ***claim 26***, Teradaira discloses the method discussed above in claim 21, and further teaches that the status information acquisition step acquires the communication mode as the status information data when two-way communication is held with the printer (column 7, lines 25-64, and column 12, line 15-column 13, line 29).

Regarding ***claim 28***, Teradaira discloses a status information printing system consisting of a host computer and a printer that are connected for two-way communication via a predetermined data transfer line (see abstract, Fig. 5, and column 7, lines 25-30), the system characterized by the printer configured to output status information data through the two-way communication to the host computer, without solicitation from the host computer, in accordance with a status information output initiation instruction (see abstract, column 7, lines 25-64, and column 12, line 15-column 13, line 29), and perform predetermined printing based on printing data outputted by the host computer (column 6, lines 40-59, and column 8, line 7-column 9, line 41), and the host computer configured to acquire the status information data outputted from the printer through the two-way communication (column 7, lines 25-30, and column 12, line 15-column 13, line 29), and generate predetermined printing data based on the status information data, and output the printing data to the printer (column 12, line 49-column 13, line 45).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 7, 20, and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Teradaira *et al.* (U.S. Patent Number 5,800,081) in view of Akiyama *et al.* (U.S. Patent Number 6,771,378, cited in the Office action dated 8/9/05).

Regarding ***claims 7, 20, and 27***, Teradaira discloses the medium, controller, and method discussed above in claims 1, 14, and 21, respectively, but fails to expressly disclose if the printing data generation function is configured to generate from a default file the form of the printing images to be printed by the printer, generate the character string image corresponding to the status based on the status information data, and generate the printing image by superimposing them together.

Akiyama discloses a medium having a status information printing program recorded thereon to be run on a host computer in order for a printer to print status information (see Fig. 1, column 8, line 54-column 9, line 51, and column 55, lines 57-61), the host computer and the printer being connected for two-way communication (see Fig. 1, column 8, lines 56-64), the printing program comprising an output initiation instruction monitor function configured to monitor the output initiation instruction for the status information that the printer outputs through the two-way communication (see Figs. 43A-43C, step, S1602, and column 55, line 41-column 56, line 43), a status information acquisition function on the host side configured to acquire

status information data from the printer through the two-way communication (step S1603, column 56, lines 5-43), a printing data generation function configured to generate printing data to be printed by the printer based on the status information data acquired by the status information acquisition function on the host side when the output initiation instruction is recognized by the output initiation instruction monitor function (steps S1604-S1611, column 56, line 11-column 57, line 51), and a printing data output function configured to output to the printer through the two-way communication the printing data generated by the printing data generation function (steps S1613-S1614, column 57, line 49-column 58, line 8). Further, Akiyama discloses the medium discussed above in claim 1, and further teaches that the printing data generation function is configured to generate from a default file the form of the printing images to be printed by the printer (column 9, lines 25-51), generate the character string image corresponding to the status based on the status information data (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7), and generate the printing image by superimposing them together (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7).

Teradaira & Akiyama are combinable because they are from the same field of endeavor, being systems that transmit status information of a printer to a host computer via a two-way connection. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the printing data taught by Akiyama within the system of Teradaira. The suggestion/motivation for doing so would have been that Teradaira's system would become more efficient with the addition of Akiyama's teachings, as print data would be adapted to correspond to the printer's settings, as recognized by Akiyama in column 9, lines 25-51.

Therefore, it would have been obvious to combine the teachings of Akiyama with the system of Teradaira to obtain the invention as specified in claims 7, 20, and 27.

8. **Claims 12 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Teradaira *et al.* (U.S. Patent Number 5,800,081) in view of Sato *et al.* (U.S. Patent Number 6,667,812, cited in the Office action dated 8/9/05).

Regarding ***claim 12***, Teradaira discloses the printer discussed above in claim 8, but fails to expressly disclose if the output initiation instruction includes a predetermined instruction button, multiple operation of gives the output initiation instruction.

Sato discloses a printer for holding two-way communication with a host computer and printing status information about the printer (see Figs. 4, 5, 7, and 10, and column 5, lines 5-50), the printer comprising an output initiation instruction unit configured to instruct the output initiation of the status information (column 5, line 59-column 6, line 11), a status information acquisition unit on the printer's side configured to acquire status information data on the printer (column 5, line 59-column 6, line 11), a status information output unit configured to output through the two-way communication the status information data acquired by the status information acquisition unit on the printer's side (column 5, line 36-column 6, line 39, and column 8, lines 42-65), and causing the host computer to generate printing data for the printer to print the status information (column 4, lines 13-60, column 7, lines 35-65, and column 8, lines 42-65), and a printing unit configured to receive the printing data from the host computer through the two-way communication and performing predetermined printing based on the received data (column 1, line 8-column 2, line 30, and column 4, lines 36-60). Further, Sato

teaches that the output initiation instruction includes a predetermined instruction button, multiple operation of gives the output initiation instruction (column 6, line 62-column 7, line 30).

Teradaira & Sato are combinable because they are from the same field of endeavor, being systems that transmit status information of a printer to a host computer via a two-way connection. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the instruction button taught by Sato within the system of Teradaira. The suggestion/motivation for doing so would have been that Teradaira's system would become more user-friendly with the addition of Sato's teachings, as user's would be able to select the desired operation, as recognized by Sato in column 6, line 62-column 7, line 30. Therefore, it would have been obvious to combine the teachings of Sato with the system of Teradaira to obtain the invention as specified in claim 12.

Regarding ***claim 13***, Teradaira discloses the printer discussed above in claim 8, but fails to expressly disclose if the status information acquisition unit is configured to acquire fixed status information only when the printer is booted, and the status information acquisition unit is configured to acquire sequentially updated status information when the status is updated.

Sato discloses a printer for holding two-way communication with a host computer and printing status information about the printer (see Figs. 4, 5, 7, and 10, and column 5, lines 5-50), the printer comprising an output initiation instruction unit configured to instruct the output initiation of the status information (column 5, line 59-column 6, line 11), a status information acquisition unit on the printer's side configured to acquire status information data on the printer (column 5, line 59-column 6, line 11), a status information output unit configured to output through the two-way communication the status information data acquired by the status

information acquisition unit on the printer's side (column 5, line 36-column 6, line 39, and column 8, lines 42-65), and causing the host computer to generate printing data for the printer to print the status information (column 4, lines 13-60, column 7, lines 35-65, and column 8, lines 42-65), and a printing unit configured to receive the printing data from the host computer through the two-way communication and performing predetermined printing based on the received data (column 1, line 8-column 2, line 30, and column 4, lines 36-60). Further, Sato teaches that the status information acquisition unit is configured to acquire fixed status information only when the printer is booted, and the status information acquisition unit is configured to acquire sequentially updated status information when the status is updated (column 6, lines 12-39, and column 13, lines 21-27).

Teradaira & Sato are combinable because they are from the same field of endeavor, being systems that transmit status information of a printer to a host computer via a two-way connection. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the instruction button taught by Sato within the system of Teradaira. The suggestion/motivation for doing so would have been that Teradaira's system would become more efficient with the addition of Sato's teachings, as status information would be acquired when the printer is booted, as recognized by Sato in column 6, lines 12-39. Therefore, it would have been obvious to combine the teachings of Sato with the system of Teradaira to obtain the invention as specified in claim 13.

Citation of Pertinent Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Higuchi *et al.* (U.S. Patent Number 6,977,739) discloses a printing apparatus.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (571) 272-7410. The examiner can normally be reached on Monday-Friday, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph R. Pokrzywa
Primary Examiner
Art Unit 2625

jrp